Contents

VOLUME 32, NUMBER 1, JANUARY 1993

D. F. Kapraun. Karyology of marine green algae (Phycological Reviews 12) 1–21

A. Ojala. The influence of light quality on growth and phycobiliprotein/chlorophyll *a* fluorescence quotients of some species of freshwater algae in culture 22–28

P. Henriksen, F. Knipschildt, Ø. Moestrup and H. A. Thomsen. Autecology, life history and toxicology of the silicoflagellate *Dictyocha speculum* (Silicoflagellata, Dictyochophyceae) . . . 29–39

M. Kajimura. *Dudresnaya okiensis* sp. nov. (Dumontiaceae, Rhodophyta) from the Sea of Japan 40–47

R. L. Raschke. Diatom (Bacillariophyta) community response to phosphorus in the Everglades National Park, USA 48–58

Ø. Moestrup and D. R. A. Hill. Reconstruction of the flagellar surface armour in *Pyramimonas mantoniae* sp. nov. and *P. mitra* Moestrup et Hill (Prasinophyceae) 59–67

A. Sivan and S. (Malis) Arad. Induction and characterization of pigment mutants in the red microalga *Porphyridium* sp. (Rhodophyceae) 68–72

G. Hansen. Dimorphic individuals of *Dinophysis acuta* and *D. norvegica* (Dinophyceae) from Danish waters (Research Note) 73–75

Book review 76

Announcements 77

Published 4 January 1993

VOLUME 32, NUMBER 2, MARCH 1993

G. M. Hallegraeff. A review of harmful algal blooms and their apparent global increase (Phycological Reviews 13) 79–99

Y. M. Chamberlain. Observations on the crustose coralline red alga *Spongites yendoi* (Foslie) comb. nov. in South Africa and its relationship to *S. decipiens* (Foslie) comb. nov. and *Lithophyllum natalense* Foslie 100–115

C. A. Kosman, H. A. Thomsen and J. B. Østergaard. Parmales (Chrysophyceae) from Mexican, Californian, Baltic, Arctic and Antarctic waters with the description of a new subspecies and several new forms 116–128

H. Nozaki. Morphology, reproduction and taxonomy of *Characiochloris sasae* sp. nov. (Chlorophyta) from Japan 129–135

A. Zeller and D. F. Mandoli. Growth of *Acetabularia acetabulum* (Dasycladales, Chlorophyta) on solid substrata at specific cell densities 136–142

D. W. Keats, A. Groener and Y. M. Chamberlain. Cell sloughing in the littoral zone coralline alga, *Spongites yendoi* (Foslie) Chamberlain (Corallinales, Rhodophyta) 143–150

J. N. Navarro. Three-dimensional imaging of diatom ultrastructure with high resolution low-voltage SEM (Research Note) 151–156

Book reviews 157

Announcements 158

Erratum 158

Published 1 March 1993

VOLUME 32, NUMBER 3, MAY 1993

M.-J. Chrétiennot-Dinet, A. Sournia, M. Ricard and C. Billard. A classification of the marine phytoplankton of the world from class to genus 159–179

I. A. Mahasneh, A. Kumar and D. N. Tiwari. The switch-on time of the phosphomonoesterase activity in relation to cellular phosphorus in six strains of blue-green algae (Cyanobacteria) 180–183

E. Verheij. The genus *Sporolithon* (Sporolithaceae fam. nov., Corallinales, Rhodophyta) from the Spermonde Archipelago, Indonesia 184–196

G. V. Deshmukhe and M. Tatewaki. Occurrence of somatic diploidization in the life history of *Coilodesme japonica* (Dictyosiphonales, Phaeophyta) 197–203

A. K. S. K. Prasad, G. A. Fryxell and R. J. Livingston. The genus *Thalassiosira* (Bacillariophyta): *T. cedarkeyensis*, a new marine benthic diatom from the Florida coast of the Gulf of Mexico 204–212

B. Marin, C. Matzke and M. Melkonian. Flagellar hairs of *Tetraselmis* (Prasinophyceae): ultrastructural types and intrageneric variation 213–222

M. Poulin. *Craspedopleura* (Bacillariophyta), a new diatom genus of arctic sea ice assemblages 223–233

R. R. L. Guillard and P. E. Hargraves. *Stichochrysis immobilis* is a diatom, not a chrysophyte (Research Note) 234–236

Published 30 April 1993

VOLUME 32, NUMBER 4, JULY 1993

K. S. Edyvane and H. B. S. Womersley. Morphology and taxonomy of *Rhodoglossum gigartinoides* (Sonder) comb. nov. (Gigartinaceae, Rhodophyta) from Australia and New Zealand . . 237–250

S. M. P. B. Guimarães. Morphology and systematics of the red algal parasite *Dawsoniocolax bostrychiae* (Choreocolacaceae, Rhodophyta) 251–258

N. Plain, C. Largeau, S. Derenne et A. Couté. Variabilité morphologique de *Botryococcus braunii* (Chlorococcales, Chlorophyta): corrélations avec les conditions de croissance et la teneur en lipides 259–265

M. D. Guiry and H. B. S. Womersley. *Capreolia implexa* gen. et sp. nov. (Gelidiales, Rhodophyta) in Australia and New Zealand; an intertidal mat-forming alga with an unusual life history . 266–277

H. A. Thomsen, K. R. Buck, D. Marino, D. Sarno, L. E. Hansen, J. B. Østergaard and J. Krupp. *Lennoxia faveolata* gen. et sp. nov. (Diatomophyceae) from South America, California, West Greenland and Denmark 278–283

B. Konar. Demography and morphology of the geniculate coralline, *Bossiella californica* ssp. *schmittii* (Corallinales, Rhodophyta), in a central California kelp forest 284–290

J. Godin, C. Destombe and C. A. Maggs. Unusual chromosome number of *Gracilaria verrucosa* (Gracilariales, Rhodophyta) in the Cape Gris-Nez area, Northern France 291–294

D. Penrose and Y. M. Chamberlain. *Hydrolithon farinosum* (Lamouroux) comb. nov.: implications for generic concepts in the Mastophoroideae (Corallinaceae, Rhodophyta) 295–303

R. G. Sheath and K. M. Cole. Distribution and systematics of *Batrachospermum* (Batrachospermales, Rhodophyta) in North America. 2. Chromosome numbers (Research Note) . . 304–306

L. Hoffmann and B. Mayele. Ultrastructure of the plasmalemma of the cave *Cyanidium* (Rhodophyta) (Research Note) 307–309

B. Brück and R. Schnetter. Vegetative propagation of the microthallus in a strain of *Bryopsis plumosa* (Chlorophyta, Bryopsidales) from the Canary Islands (Research Note) 310–312

Book notice 313

In Memoriam 313

Published 23 June 1993

VOLUME 32, NUMBER 5, SEPTEMBER 1993

M. Grilli Caiola, R. Ocampo-Friedmann and E. I. Friedmann. Cytology of long-term desiccation in the desert cyanobacterium *Chroococcidiopsis* (Chroococcales) 315–322

Wm J. Woelkerling, D. Penrose and Y. M. Chamberlain. A reassessment of type collections of non-geniculate Corallinaceae (Corallinales, Rhodophyta) described by C. Montagne and L. Dufour, and of *Melobesia brassica-florida* Harvey 323–331

J. Nossag and W. Kasprik. The movement of *Micrasterias thomasiana* (Desmidiaceae, Zygnematophyceae) in directed blue light 332–337

S. D. Sym and R. N. Pienaar. Further observations on *Trichocystis*, a subgenus of *Pyramimonas* (Prasinophyceae, Chlorophyta) 338–350

E. Costas, S. Gonzalez Gil, A. Aguilera and V. Lopez-Rodas. Effects of mitotic growth factors on growth rates in marine dinoflagellates 351–355

Y. Berger-Perrot, J-Cl. Thomas and M-Th. L'Hardy-Halos. Gametangia, gametes, fertilization and zygote development in *Ulothrix flacca* var. *roscoffensis* (Chlorophyta) 356–366

G. Furnari and D. Serio. The distinction of *Laurencia truncata* (Ceramiales, Rhodophyta) in the Mediterranean Sea from *Laurencia pinnatifida* 367–372

R. W. Jordan and A. H. L. Chamberlain. *Canistrolithus valliformis* gen. et sp. nov. (Syracosphaeraceae, Prymnesiophyta), a comparison with the genus *Alisphaera* 373–378

K. Lüning and P. Kadel. Daylength range for circannual rhythmicity in *Pterygophora californica* (Alariaceae, Phaeophyta) and synchronization of seasonal growth by daylength cycles in several other brown algae 379–387

J. John. Morphology and ultrastructure of the tubes of *Mastogloia cocconeiformis* (Bacillariophyta) from Shark Bay, Western Australia 388–394

J. A. Phillips, R. J. King, J. Tanaka and A. Mostaert. *Stoechospermum* (Dictyotales, Phaeophyceae): a poorly known algal genus newly recorded in Australia (Research Note) 395–398

Book review 399–400

Publication received 400

Published 27 August 1993

VOLUME 32, NUMBER 6, NOVEMBER 1993

U. Karsten, J. A. West and E. K. Ganesan. Comparative physiological ecology of *Bostrychia moritziana* (Ceramiales, Rhodophyta) from freshwater and marine habitats 401–409

M. A. Faust. Three new benthic species of *Prorocentrum* (Dinophyceae) from Twin Cays, Belize: *P. maculosum* sp. nov., *P. foraminosum* sp. nov. and *P. formosum* sp. nov. 410–418

W. H. C. F. Kooistra, J. L. Olsen, W. T. Stam and C. van den Hoek. Problems relating to species sampling in phylogenetic studies: an example of non-monophyly in *Cladophoropsis* and *Struvea* (Siphonocladales, Chlorophyta) 419–428

F. R. Trainor. Cyclomorphosis in *Scenedesmus subspicatus* (Chlorococcales, Chlorophyta): stimulation of colony development at low temperature 429–433

A. K. S. K. Prasad and R. J. Livingston. Frustule morphology of the planktonic pennate diatom *Fragilaria gessneri* Hustedt (Bacillariophyta) from the Florida coast of the Gulf of Mexico, with a description of *Desikaneis* gen. nov. 434–443

J. Zhou and L. Fritz. Ultrastructure of two toxic marine dinoflagellates, *Prorocentrum lima* and *Prorocentrum maculosum* 444–450

I. A. Abbott and R. E. Norris. New species of Ceramiaceae (Rhodophyta) from the Hawaiian Islands 451–461

H. Kawai. Morphology and life history of *Kurogiella saxatilis* gen. et sp. nov. (Chordariales, Phaeophyceae) 462–467

IPS Constitution 468–470

In Memoriam 471

Author and Subject Indexes 473–478

Published November 9, 1993